

1 I claim:

2 1) An interactive seamer comprising,

3 means for displaying a panorama generated from an number of original single view images,  
4 said original single view images being joined in accordance with parameters provided by an  
5 operator,

6 means for displaying control points on the location in said panorama that is projected from a  
7 particular original single view image, whereby said control points can be dragged to change  
8 the projection of said original single view image into said panorama,

9 means for changing the displayed panorama as said operator changes moves said control  
10 points.

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12 2) An interactive seaming program which displays

13 a Panorama Window that displays a panorama as it is being seamed from a number of  
14 single view images, one of said single view images being a Selected Single View image,  
15 an Alpha Window that shows areas of said Selected Single View image which have  
16 different values of opacity, the size of the areas in said Alpha window being subject to  
17 change by a user,

18 whereby the pixels visible in said Panorama Window in an overlap area can be changed.

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20 3) An interactive seaming program that seams a number of original single view images into  
21 a panorama,

22 a Panorama Window which displays said panorama as said seaming process progresses,  
23 said Panorama Window displaying the area contributed to said panorama by each of said  
24 original single view images,

25 a Selected Single View Image Window which displays a selected on of said original single  
26 view images modified according to a number of parameters,

27 means for changing said parameters into modified parameters,

28 means for seaming said Selected Single View Image into said panorama according to said  
29 modified parameters.

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31 4, The seamer recited in claim 1 wherein said panorama is displayed in a Panorama  
32 Window as said seaming operation proceeds.

1 5. The seamer recited in claim 1 including an Alpha Window which shows an area along  
2 the sides of an image, the configuration of said area being changeable, one perimeter of  
3 said area designating the area of said image wherein said image has an opacity of 1 in any  
4 overlap in said panorama, and the other perimeter of said area designating the area of said  
5 image wherein said image has an opacity of 0 in any overlap in said panorama, the opacity  
6 varying from 1 to 0 between said areas.

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8 6. The seamer recited in claim 1, including means for interactively changing the the opacity  
9 of an image in overlap area of said panorama.

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11 7. The seamer recited in claim 1 wherein said seamer includes a Panorama Window which  
12 displays said panorama as said seaming operation proceeds, a Selected View Image  
13 Window wherein various parameters which specify how a particular image is seamed into  
14 said panorama can be changed, and an Alpha Window which shows an area of a particular  
15 image wherein the opacity of said image varies from a first value to a second value, and  
16 means for changing the size and shape of said area.

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18 8. A computer system to seam a plurality of original single view images into a panorama  
19 comprising,  
20 a Panorama Window which shows said panorama as it is being seamed,  
21 a Selected Image Window which shows a selected one of said original single view images as  
22 modified by a plurality of parameters,  
23 means for changing the value of said parameters  
24 an Alpha Window which shows a peripheral area of said a selected one of said single view  
25 images, said peripheral area varying in opacity from a first value on one edge of said area  
26 to a second value on the other edge of said area,  
27 means for changing the shape and location of said peripheral area,  
28 a program for creating a panorama in said Panorama Window from said single view images  
29 modified according to said parameters and overlapped according to said shape of said  
30 peripheral areas

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32 9. The system recited in claim 8 wherein said original single view images are not changed  
33 and said program records the values of said parameters and the shape of said peripheral  
34 area for each of said images.

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2 10. The seaming program recited in claim 2 wherein said panorama is displayed in a  
3 Panorama Window as said seaming operation proceeds.  
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5 11. The seaming program recited in claim 2 including an Alpha Window which shows an  
6 area along the sides of an image, the configuration of said area being changeable, one  
7 perimeter of said area designating the area of said image wherein said image has an  
8 opacity of 1 in any overlap in said panorama, and the other perimeter of said area  
9 designating the area of said image wherein said image has an opacity of 0 in any overlap in  
10 said panorama, the opacity varying from 1 to 0 between said areas.  
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12 12. The seaming program recited in claim 2, including means for interactively changing the  
13 opacity of an image in overlap area of said panorama.  
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15 13. The seaming program recited in claim 2 wherein said seaming program includes  
16 means for creating a Panorama Window which displays said panorama as said seaming  
17 operation proceeds, a Selected View Image Window wherein various parameters which  
18 specify how a particular image is seamed into said panorama can be changed, and an  
19 Alpha Window which shows an area of a particular image wherein the opacity of said image  
20 varies from a first value to a second value, and means for changing the size and shape of  
21 said area.  
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23 14. The seaming program recited in claim 3 wherein said original single view images are  
24 first changed from xy form to hp form and then changed from hp form to a panorama  
25 according to the values in a parameter table.  
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